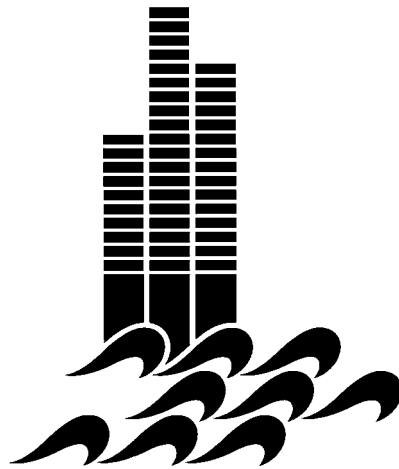


# **PLAN CONSTRUCTION GUIDE FOR FOOD FACILITIES IN LONG BEACH**



**BUREAU OF ENVIRONMENTAL HEALTH  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
2525 GRAND AVENUE, ROOM 220  
REVISED 2003**

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**PLAN CONSTRUCTION GUIDE  
FOR FOOD FACILITIES**

CITY OF LONG BEACH  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
BUREAU OF ENVIRONMENTAL HEALTH  
2525 GRAND AVE, ROOM 220  
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**PROCEDURE FOR PLAN SUBMITTAL**

**Pursuant to the California Health & Safety Code, Section 113915, approval must be obtained from the local Health Department before constructing, enlarging, altering, converting or remodeling any building for use as a food facility (A remodel is defined as an addition, repair, or enlargement to the existing permitted facility, which may or may not require a permit from the Department of Building and Planning). The following requirements are necessary to process and approve food facility plans as well as to obtain final approval to open for business:**

- 1. Submit a minimum of (3) sets of detailed plans and specifications, complete a food construction plan application form and pay the required plan check fees.**
- 2. The plans must include sufficient information to demonstrate compliance with the California Uniform Retail Food Facilities Law in order to be approved (see Requirements for Food Facility Plan Approval, page 4).**
- 3. Plans may be prepared by an architect, draftsman, contractor or owner. All plans must be drawn in a professional manner encompassing all applicable requirements of this construction guide. Plans must be drawn at minimum scale of ¼ inch = 1 ft.**
- 4. The applicant will be notified after the plans are approved or rejected. Plans that are incomplete, have a multitude of changes or are otherwise not approved, will be returned for revision before approval may be granted.**
- 5. Upon approval, two (2) sets of plans will be returned to the applicant, and the third set will be kept on file until construction has been completed. An approved set of plans must be maintained at the construction site until the final inspection has been made.**
- 6. If any changes on the plans are desired after approval has been obtained, additional approval from this Division must be obtained for such changes. Amended plans shall be required.**

- 7. If plans are not picked up by the applicant or his or her agent within sixty (60) days after notification of approval or rejection, plans shall be discarded.**
- 8. Before commencing construction, a building permit must be obtained from the Department of Planning and Building. By law, building permits for food facilities are not to be issued until plan approval has been obtained from the Bureau of Environmental Health.**
- 9. All Construction and equipment installations are subject to final onsite inspection. If there are any questions during the construction phase and well before facility opening (one to two weeks), the applicant should call the plan checker to avoid possible delays in opening.**
- 10. The food facility shall not be cleared to open for business until final approval is granted by the Bureau of Environmental Health. To prevent opening delays, appointments for pre-opening final inspections must be coordinated at least two (2) days in advance with the plan check specialist. Final approvals will be contingent on the following:**
  - a. The facility must conform to the latest set of approved plans.**
  - b. Proof that the Building and Fire Departments have approved/inspected the facility on site (final sign off on respective "job cards,"etc.). A certificate of occupancy must be obtained prior to health department approval for any new buildings or major remodels.**
  - c. Utilities (electric, gas, potable water) must be provided at time of final inspection.**
  - d. The facility must have approval for a valid Public Health Permit prior to operating.**

## **REQUIREMENTS FOR FOOD FACILITY PLAN APPROVAL**

The plans shall show and specify in detail the following:

### **GENERAL:**

1. Provide exact name and address of the food facility, the name and telephone number of owner, contractor and contact person.
2. Plans shall be drawn to scale, e.g., minimum  $\frac{1}{4}" = 1'$ , using noneraseable ink or print (no pencil), and shall include:
  - a. A detailed site plan.
  - b. Floor plan of entire food establishment, e.g., toilets, dressing room, storage, garbage and trash areas , etc., including all interior and exterior doors (Include total square footage of the facility).
  - c. Complete equipment layout, including equipment specifications meeting National Sanitation Foundation (NSF) standards or equivalent. SEE ATTACHMENT IA & IB.
  - d. Complete plumbing layout, showing sewer, waste drains, floor sinks, vents, cleanouts, etc.
  - e. Complete electrical layout.
  - f. Complete exhaust ventilation layout including location of make-up air ducts. Indicate types of hoods, etc. SEE ATTACHMENT IIA & IIB.

Indicate the type of comfort cooling in the building, "refrigerated air conditioning", "evaporative cooling", or "no cooling system".

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  - g. A site plan showing the proposed exterior rubbish and food waste storage receptacle location. Show hose bibs and approved drainage.
  - h. Complete finish schedule for walls, ceilings, and floors that indicates the type of material, the color, the surface finish, and the type of integral coved base at the floor/wall juncture. SEE ATTACHMENT IC.

Samples of proposed finish materials may be required prior to plan approval.

- i. Location of the manager's or chef's office. Spaces such as change rooms or food storage areas cannot be used for office space.
3. Approved materials and good workmanship are significant factors in the evaluation and final field approval of food facility construction and equipment installation, i.e., smooth washable surfaces for ease of cleaning and to minimize insect and rodent harborage.
4. All new and replacement equipment shall meet or be equivalent to applicable NSF standards or, in the absence of applicable NSF standards, equipment design, construction and installation is subject to approval by this agency (All used equipment is subject to field evaluation).

### **FIELD CONSTRUCTION INSPECTION**

1. **PRELIMINARY CONSTRUCTION INSPECTION**  
When construction is approximately 75% to 80% completed with plumbing, rough ventilation, and rough equipment installed, you should contact the Health Department for a preliminary construction inspection. Requests should be made at least two (2) working days in advance. A preliminary inspection should be scheduled for no less than two weeks prior to the proposed opening of the food establishment.
2. **FINAL CONSTRUCTION INSPECTION**  
Upon completion of all construction, including all finishing work, you must contact the Health Department for a final construction inspection. You will not be approved to operate or issued a Health Permit until the establishment passes a final inspection. In no case should a final inspection be requested less than five (5) working days prior to the proposed opening of the establishment. Final construction must be approved by this agency prior to opening for business or use of remodeled area.

### **GENERAL CONSTRUCTION AND EQUIPMENT REQUIREMENTS**

The plans must show and specify in detail the following:

1. **FLOORS:**
  - a. Floors in food establishments (except in dining areas) shall be durable, smooth and impervious to water, grease and acid, and of easily cleanable construction, e.g., quarry tile, ceramic tile, sealed concrete, sheet vinyl, etc. Floor surfaces in all areas where food is prepared, packaged, dispensed or stored, where any utensil is washed, where refuse or garbage is stored, where janitorial facilities are located, in all toilet and

handwashing areas and in employee change and storage areas, shall be of an approved type that continues up the wall or toe-kicks, at least four (4) inches (recommended six (6) inches), forming a 3/8 inch minimum radius cove as integral unit (Vinyl rubber top set base is not acceptable).

- b. Floor drains are required in floors that are water-flushed for cleaning, and/or where pressure spray methods for cleaning equipment are used. Where floor drains are utilized, the floor surface shall be sloped to the floor drains.
- c. Flooring under equipment and on the coved bases shall be completely smooth. Floor surfaces which contain non skid agents shall be restricted to traffic areas only.
- d. High pressure hot water cleaning systems are required in addition to floor drains if the degree of roughness of the nonskid agent is deemed excessive upon evaluation by this Division.

## **2. WALLS:**

- a. Walls in all areas except dining areas shall be durable, smooth and nonabsorbent, with a light colored, easily cleanable washable finish. Note: Brick, concrete block, rough concrete, rough plaster, grooved paneling, wall paper or vinyl wall covering are not acceptable.
- b. Wall surface materials are subject to evaluation and may require submission of samples.
- c. All wall surfaces shall be covered with a gloss or semigloss enamel, epoxy, fiberglass reinforced polyester (FRP), ceramic tile, or other approved materials.
- d. All walls behind sinks must be protected with at least an 8' high water-resistant material (e.g., green board, FRP, stainless steel, ceramic tile or other approved material).

## **3. CEILINGS:**

- a. Ceilings in all areas except dining areas shall be durable, smooth and nonabsorbent with a light-colored, easily cleanable, washable finish. Blown acoustical type ceiling is not acceptable.

- b. Ceiling panels may be acceptable if they comply with the preceding requirements and if approved by this division.

**Note:** Waitress stations, salad bars, food serving or self-service open food counters, or similar stations located immediately adjacent to, or in dining areas must comply with floor, wall and ceiling requirements.

#### **4. CONDUITS:**

- a. All plumbing, electrical, and gas lines shall be concealed within the building structure to as great an extent as possible.
- b. Where conduit or pipe lines enter a wall, ceiling or floor, the opening around the line shall be tightly sealed.
- c. Conduit or pipe lines shall not be installed across any aisle, traffic area or door opening.
- d. Multiple runs or clusters of conduit or pipelines shall be furred out and encased in an approved runway or other sealed enclosure.

#### **5. EXHAUST HOODS AND DUCTS:**

- a. Mechanical exhaust ventilation shall be required at or above all ranges, griddles, ovens, deep fat fryers, barbecues, rotisseries and high temperature dishwashing machines or similar equipment to effectively remove grease, smoke, steam, vapors, heat or odors.

A Type I Hood is a kitchen hood collecting and removing grease and smoke. They shall be equipped with approved grease filters or grease extractors designed for that specific purpose.

A Type II Hood is a general kitchen hood for collecting and removing steam, vapors, heat or odors.

- b. All hoods, ducts, and exhaust outlets shall be installed in accordance with Chapter 20 of the current edition of the Uniform Mechanical Code as adopted by the Department of Planning and Building.
- c. Detailed Requirements: Provide an illustration sheet showing hood exhaust data. SEE ATTACHMENT IIA & IIB.



- d. All joints and seams shall be sealed, welded or soldered for ease or cleaning.
- e. **Canopy-Type Hoods:** Canopy-type hoods shall not be more than (7) feet above the floor and shall not be more than four (4) feet above the cooking surface. The hood shall overhang or extend a horizontal distance of not less than six (6) inches beyond the outer edges of the cooking equipment to the inner lip of the hood on all open sides. It shall have grease troughs or drip pans that are easily cleanable.
- f. **Noncanopy-Type (High Velocity) Hood:** Noncanopy-type hoods will be approved providing they are constructed to be easily cleanable and they comply with the minimum exhaust air velocity requirements. Shielding at the ends of the hood may be necessary to prevent interference from cross drafts.
- g. **Make-up Air:** Make-up air shall be provided that is at least 95% equivalent to the air that is mechanically exhausted and shall be inter-connected by a single control switch. Windows and doors shall not be used for the purpose of providing make-up air.
- h. Food heating or warming devices, cheese melters, etc., that are installed above other equipment beneath an exhaust hood may create an air flow obstruction to proper ventilation of the basic equipment for which the hood ventilation system is designed. The design, construction and installation of such warming devices under a hood are subject to evaluation and approval prior to installation.
- i. **Fire Extinguishing System:** Fire extinguishing systems are required by the Fire Department. They shall be installed so as to allow easy cleaning of the hood and duct systems.

## **6. REFRIGERATION:**

- a. All Refrigeration units shall be adequate in capacity to meet the needs of the proposed operation and shall comply with the following requirements:
  - i. Be specifically constructed for commercial use, i.e., NSF or equivalent. Domestic model refrigeration units will not be accepted.
  - ii. Be provided with accurate, readily visible thermometer.

- iii. Have shelving that is nonabsorbent and easily cleanable. Wood is not acceptable.
  - iv. Have smooth, nonabsorbent and easily cleanable surfaces. All joints must be sealed.
  - v. Open into an approved food handling area of the building.
  - vi. Condensate waste from reach-in refrigeration units must be drained into a floor sink via legal air gap or an approved evaporator unit.
  - vii. Rapid cool down facilities may be required depending on the food operation.
- b. Walk-in Refrigeration Units shall also:
- i. Have an integrally coved base with a radius of at least 3/8 inch at the floor/wall juncture; the floor material shall extend up to a height of at least four (4) inches on the walls. Four (4) inch approved metal top set coving with a minimum 3/8 inch radius is acceptable against metal wall surfaces of walk-in refrigeration units (Wood is not an acceptable interior finish).
  - ii. Have shelving that is at least six (6) inches off the floor with smooth, NSF type metal legs, or cantilevered from the wall, for ease of cleaning. Small, easily movable, casters may be used in place of a lower shelf inside a walk-in refrigeration unit.
  - iii. Have condensate waste drained into a floor sink via legal air gap. Floor sinks, floor drains or sewer cleanouts are not permitted inside walk-in refrigeration units.
  - iv. Open into the building.

## **7. ICE MACHINES:**

All ice machines shall be located inside the food establishment in an easily cleanable, well ventilated area, and shall be drained to a floor sink via legal air gap.

**8. FLOOR SINKS:**

- a. All condensate and similar liquid waste shall be drained by means of indirect waste pipes into a floor sink via legal air gap.
- b. Floor sinks shall be installed flush with the floor surface and have appropriate grates.
- c. Horizontal runs of drain lines shall be at least  $\frac{3}{4}$  inch from the wall and six (6) inches off the floor and shall terminate at least one (1) inch above the overflow rim of the floor sink.
- d. Floor sinks shall be located so that they are readily accessible for inspection, cleaning and repair. A protective enclosure will be required around the back side of half-exposed floor sinks installed under curb or base mounted equipment, to prevent any waste water backflow under the equipment, e.g., storage cabinet, display refrigerators, etc.
- e. The floor sink must be located within 15 feet of the drain opening of the equipment served.
- f. Waste lines may not cross any aisle, traffic area or door opening.

**9. KITCHEN UTENSIL SINK:**

- a. Where multi-service kitchen utensils (i.e., pots pans , etc.) are utilized, there shall be provided at least a three-compartment stainless steel sink with dual, integrally installed stainless steel drain boards meeting current NSF standards. This sink shall be drained in accordance with City Building & Planning Department requirements.
- b. The minimum compartment size shall be at least 18" x 18" x 12" deep with minimum 18" x 18" drain boards, however, the sink must otherwise be capable of accommodating the largest utensil to be washed and the drain boards shall be as large as the largest sink compartment.
- c. When a sink is installed next to a wall a metal "back splash" extending up the wall at least eight (8) inches shall be formed as an integral part of the sink, and sealed to the wall.
- d. An additional three-compartment sink must be installed within each separate section of a large food establishment which handles unpackaged

foods, i.e., delis, meat sections, bakeries, sushi bars, oyster bars, etc.

- e. A kitchen utensil sink is not required if the facility is 100% pre-packaged, i.e., no food or drink preparation or serving, no coffee service, no ice packing, no unpackaged snacks, candy, beef jerky, no beer tappers, no beverage dispensing, etc.

#### **10. FOOD/VEGETABLE PREPARATION SINKS:**

Food facilities utilizing a sink for food preparation, such as thawing, washing, etc. shall have at least a one (1) compartment food/vegetable preparation sink, separate from utensil washing sinks, that drains to a floor sink via legal air gap.

#### **11. EATING AND DRINKING UTENSIL SINKS:**

- a. Where multi-service eating and drinking utensils are washed by hand, a three (3) compartment stainless steel sink with dual integrally installed stainless steel drain boards shall be provided. This sink shall be drained in accordance with City Building & Planning Department requirements.
- b. The minimum compartment size shall be at least 18" x 18" x 12" deep with minimum 18" x 18" drain boards, however, the sink must otherwise be capable of accommodating the largest utensil to be washed, and the drain boards shall be as large as the largest sink compartment that is over 18 inches.
- c. Bar sinks must have a minimum compartment size of 10" x 14" x 10" deep (or a minimum of 140 square inches in surface size), with dual integral drain boards, a minimum of 18" long. Bar sinks shall have a quick drain or a fourth sink compartment for disposal of drink/ice waste. Bar sinks shall be drained in accordance with City Building & Planning Department requirements.
- d. When a sink is installed next to a wall, a metal "back splash" extending up the wall at least eight (8) inches shall be formed as an integral part of the sink, and sealed to the wall.
- e. Provide sanitizing testing equipment and/or materials to adequately measure the applicable concentration or sanitizer at the sinks for multi-use utensils.

## **12. AUTOMATIC DISHWASHER/GLASS WASHERS:**

- a. All automatic dishwashers and glass washers must be listed by the National Sanitation Foundation (NSF) under Standard No. 3, and must drain to a floor sink or other approved method via legal air gap.
- b. All spray type dishwashers and glass washers which are designed for a hot water bactericidal rinse shall be provided with a booster heater that meets the requirements of NSF Standard No. 5, or be connected to an approved recirculating water system which is capable of maintaining the rinse water at not less than 180 F. These dishwashers require an approved Type II exhaust hood.
- c. Dishwashers and glass washers must have two (2) integral stainless steel drain boards at least 18 inches long.
- d. The dishwasher must also be provided with thermometers and pressure gauges to indicate the proper water flow pressures and temperatures.
- e. A minimum of a (3) three-compartment stainless steel sink with dual integral drain boards is required in addition to any dishwashing machine.
- f. If a glass washer is proposed, one of the following should be provided:

A 3-compartment sink within the area of an adjacent kitchen.

A “backup” glass washer.

A dishwasher in an adjacent kitchen.

- g. Chemical sanitizing dishwashers and glass washers shall be provided with a sanitizing test kit.

## **13. GARBAGE DISPOSAL:**

Garbage disposals, if proposed, may be installed in drain boards if the drain board is lengthened to accommodate the disposal unit in addition to the minimum 18” required drain board size. Garbage disposals shall not be placed in or under any required sink compartment.

## **14. JANITORIAL SINK AND SUPPLIES:**

- a. A janitorial sink shall be located in a separate janitorial room or be separated from the rest of

the food establishment by a solid partition. The partition must be durable, with smooth and easily cleanable surfaces.

- b. A one compartment, wall-mounted janitorial sink or a curbed area properly sloped to a drain, that is provided with hot and cold running water through a mixing faucet, with an approved backflow prevention device, shall be installed for general cleanup activities. All curbed area surfaces shall be smooth, impervious, and of easily cleanable construction. Where duckboards or floor mats are used in the food establishment, a curbed area with a drain is required for cleaning.
- c. Free standing janitorial sinks must be provided with NSF type metal legs.
- d. A janitorial room, area or cabinet, with a mop and broom rack, separated from any food preparation, utensil washing or food or utensil storage area shall be provided for the storage of cleaning equipment (mops, buckets, brooms, etc.) and supplies (soap, cleanser, waxes bleach, etc.).

#### **15. HANDWASHING SINKS:**

- a. Hand sinks shall be provided in all food preparation areas. Hot and cold water through a mixing faucet is required.
- b. Soap and sanitary towels shall be provided in single-service, permanently installed dispensers at the hand sinks.
- c. A separate, approved hand sink must be installed within each section of a food establishment which handles unpackaged food, i.e., deli, meat, bakery, sushi bars, oyster bars, etc.
- d. Hot water temperature for customer handwashing sinks must be a maximum temperature of 110 F.

#### **16. GENERAL PURPOSE HOT WATER:**

- a. Provide a water heater which is capable of constantly supplying hot water at a temperature of at least 120 F to all sinks and other cleanup facilities (except for customer handwashing sinks, see 15d). In sizing the water heater, the peak hourly demands for all sinks, etc., are added together to determine the minimum required recovery rate. A water heater should not be

**purchased until the health department has determined the minimum required size for the particular food establishment.**

- b. All sinks shall be provided with hot and cold running water from a mixing faucet.**

**17. DIPPER WELL:**

**A running water dipper well must be provided if scoops or other reusable serving utensils are used for dipping ice cream, butter, etc. The dipper well shall be drained to a floor sink via legal air gap.**

**18. WINDOW SCREENS:**

**All openable windows, such as restroom windows, shall be screened with not less than 16-mesh screening.**

**19. SERVICE OF UNPACKAGED FOODS/UTENSILS DIRECTLY TO OR BY THE CUSTOMER:**

**Displays of unpackaged foods or utensils shall be shielded so as to intercept a direct line between the customer's mouth and the food or utensils being displayed, or shall be dispensed from approved self-service containers.**

- a. Cafeteria, buffet and salad bar self-service, food preparation equipment and food preparation areas, etc., shall be protected by approved sneeze guards.**
- b. Cleaned and sanitized glasses and stemware that are displayed or stored in bar areas over customer service counters shall be protected from customer contamination.**
- c. Approved self-service containers shall have close-fitting individual covers.**

**20. BACK-UP DRY FOOD AND BEVERAGE STORAGE:**

- a. Adequate and suitable floor space shall be provided for the storage of food, beverages, and related products. In addition to working storage and refrigeration storage, back-up storage must be provided. Working storage is considered to be cabinets over and under food handling equipment and wall mounted shelves which are located in and used in conjunction with food preparation areas.**
- l. The floor space required for back-up dry**

food storage shall be a space equal to 25% of the food preparation area. A minimum of 100 square feet of floor space is required for backup dry storage.

- II. In most cases, at least 32 linear feet of approved shelving is required for each 100 square feet of floor space. However, depending on the size and type of operation additional shelving may be required.
- III. Shelving units shall be a minimum of 18 inches in depth at least three tiers high.
  - b. Shelving shall be constructed in an easily cleanable design of smooth metal or wood which has been finished and sealed. Shelves installed on a wall shall have at least one inch of open space between the back edge of the shelf and the wall surface, otherwise, the back edge of the shelf shall be sealed to the wall with an approved silicone sealant or equivalent. The lowest shelf shall be at least (6) inches above the floor, with a clear unobstructed area below or be completely sealed to the floor with a continuously coved base, a minimum height of four (4) inches. All shelves located below a counter or work surface shall be set back at least two (2) inches from the drip line of the surface above. If shelves are supported by legs on the floor, the legs shall be smooth, NSF type metal equipment legs.
  - c. Electrical panels, large fire prevention system components or similar wall-mounted equipment shall not be installed in food storage rooms unless an adequate approved provision is made to compensate for the space required for the installation.
  - d. Each department in a grocery store which handles unpackaged food, i.e., deli, meat, bakery, etc., and satellite food service areas in restaurants, i.e., sushi bars, oyster bars, etc., must provide its own backup dry food storage space based upon the minimum requirements contained in this section.
  - e. Within bars/taverns, a separate room or area with at least 50 square feet of floor space shall be dedicated for backup beverage and bar supply storage. At least 16 linear feet of approved



shelving units shall be installed in the 50 square feet of dedicated floor space. When a bar is located within a restaurant, the backup storage requirement for the bar must be provided in addition to the required backup dry food storage.

- f. Within produce departments of grocery stores or produce stores, a separate room or area with at least 50 square feet of floor space shall be dedicated for backup storage of food and packaging supplies. At least 16 linear feet of approved shelving units shall be installed in the 50 square feet of dedicated floor space.
- g. Adequate suitable space shall be provided for storage of clean linens, including apparel, towels and cleaning cloths.

## **21. RESTROOMS:**

- a. Toilet facilities shall be provided within each food establishment, convenient for the employees.
- b. If there are five or more employees, separate toilet rooms for each sex shall be provided.
- c. Toilet facilities shall be situated so that patrons do not pass through food preparation, food storage or utensil washing areas when they are allowed access to the toilet facilities.
- d. The floors, walls and ceilings shall have surfaces that are smooth, nonabsorbent, and easily cleanable.
- e. Handwashing lavatories shall be provided within or immediately adjacent to the toilet rooms. The lavatory shall be provided with hot and cold running water from a mixing type faucet. Soap and sanitary hand towels in single-service, permanently installed dispensers shall be provided at the handwashing sink.
- f. Toilet tissue shall be provided in a permanently installed dispenser at each toilet.
- g. The restrooms shall be provided with tight fitting, self-closing doors.
- h. All toilet rooms shall be provided with approved ventilation. If adequate ventilation cannot be

provided by an openable screened window mechanical ventilation will be required.

- i. Food facilities constructed on or after January 1, 2004, that provide space for consumption of food on the premises, shall provide customer toilet facilities.

## **22. CLOTHING CHANGE ROOMS/AREAS:**

- a. A room or enclosure with lockers separate from toilets, food storage, or food preparation areas, shall be provided where there are five (5) or more employees per shift or when employees change their clothes and store their outer garments on the premises. The change room(s) shall be large enough to accommodate a standard locker for each employee per shift.
- b. A designated area with lockers separate from toilets, food storage, or food preparation areas shall be provided to store outer garments and personal belongings when a change room is not required.
- c. Clothing change rooms/areas shall not be used as an office or for other food establishment activities.

## **23. PASS-THROUGH WINDOWS:**

- a. When food is passed through a window to a customer on the outside of the building, the size of the window opening may not exceed 432 square inches.
- b. Food service pass-through window openings exceeding 216 square inches shall be equipped with an air curtain which will produce an air flow eight inches wide at the discharge opening and with an air velocity of not less than 600 FPM (feet per minute) across the entire opening at a point three feet below the air curtain. Window openings must be closed when not in use.
- c. Food service pass-through window openings less than 216 square inches shall be equipped with a sliding screen or solid closing panel.
- d. If there are two pass-through windows, the minimum distance between the window openings may not be less than eighteen (18) inches.
- e. The counter surface of the pass-through window must be smooth, free of channels and crevices and easily cleanable.

**24. DELIVERY DOORS:**

- a. All delivery doors leading to the outside shall be self-closing and shall be provided with an overhead air curtain. The air curtain, when installed inside the building, must produce a downward-outward air flow not less than three inches thick at the nozzle with an air velocity of not less than 1600 FPM (feet per minute) across the entire opening at a point three feet above the floor. When installed outside the building, the same velocity of air must be directed straight down over the entire door opening. The air curtain shall turn on automatically when the door is opened.
- b. Large cargo-type doors shall not open directly into food preparation areas. Cargo-type doors that open into any food warehouse or food facility may only be open during deliveries.
- c. An air curtain is not a substitute device to permit a door to remain open.

**25. CUSTOMER ENTRANCE DOORS:**

All entrance doors leading to the outside shall be tight fitting, open outward and be self-closing to effectively prevent the entrance of flies and rodents.

**26. GARBAGE AND TRASH AREA:**

- a. An area shall be provided for the storage and cleaning of garbage and trash containers.
- b. The walls, floor and ceiling of this room or area shall be constructed so as to be smooth, impervious and easily cleanable.
- c. Inside trash storage areas shall properly slope to a floor drain.
- d. Outside trash storage areas shall properly drain so as not to create a nuisance.
- e. Outside trash storage areas should be situated as far away from delivery doors as possible.

**27. LIGHTING:**

- a. All food preparation areas, dishwashing areas, and all bar and fountain glass washing sink areas (except where alcoholic beverage utensils are

washed), shall be provided with at least 20 foot candles of light, 30 inches above the floor.

- b. Food and utensil storage rooms, refrigeration storage, toilet rooms and dressing rooms shall be provided with at least 10 foot candles of light.
- c. A minimum of 20 foot candles of light shall be provided in all areas during clean up activities.
- d. Light fixtures in areas where food is prepared, open food is stored, or utensils are cleaned shall be of shatterproof construction or shall be protected with shatterproof shields.

#### **28. VENTILATION:**

Provide adequate ventilation to remove gases, odors, steam, heat, grease, vapors or smoke from all rooms in the facility including toilet, janitorial, change room and similar rooms.

#### **29. EQUIPMENT:**

- a. All new and replacement equipment shall meet or be equivalent to applicable National Sanitation Foundation (NSF) standards or, in the absence of applicable NSF standards, equipment design, construction and installation is subject to approval by this Division.
- b. All show and display cases, counters, shelves, tables, refrigeration equipment, sinks and other equipment used in connection with the preparation, service and display of food, shall be made of nontoxic materials and so constructed and installed as to be easily cleanable.
- c. All equipment shall be placed on minimum six (6) inch high, NSF type legs or completely sealed in position on a four (4) inch high continuously coved base or concrete curb, or on approved casters, or cantilevered from the wall.

#### **30. WATER:**

An adequate, protected, pressurized, potable water supply shall be provided to serve the facility.

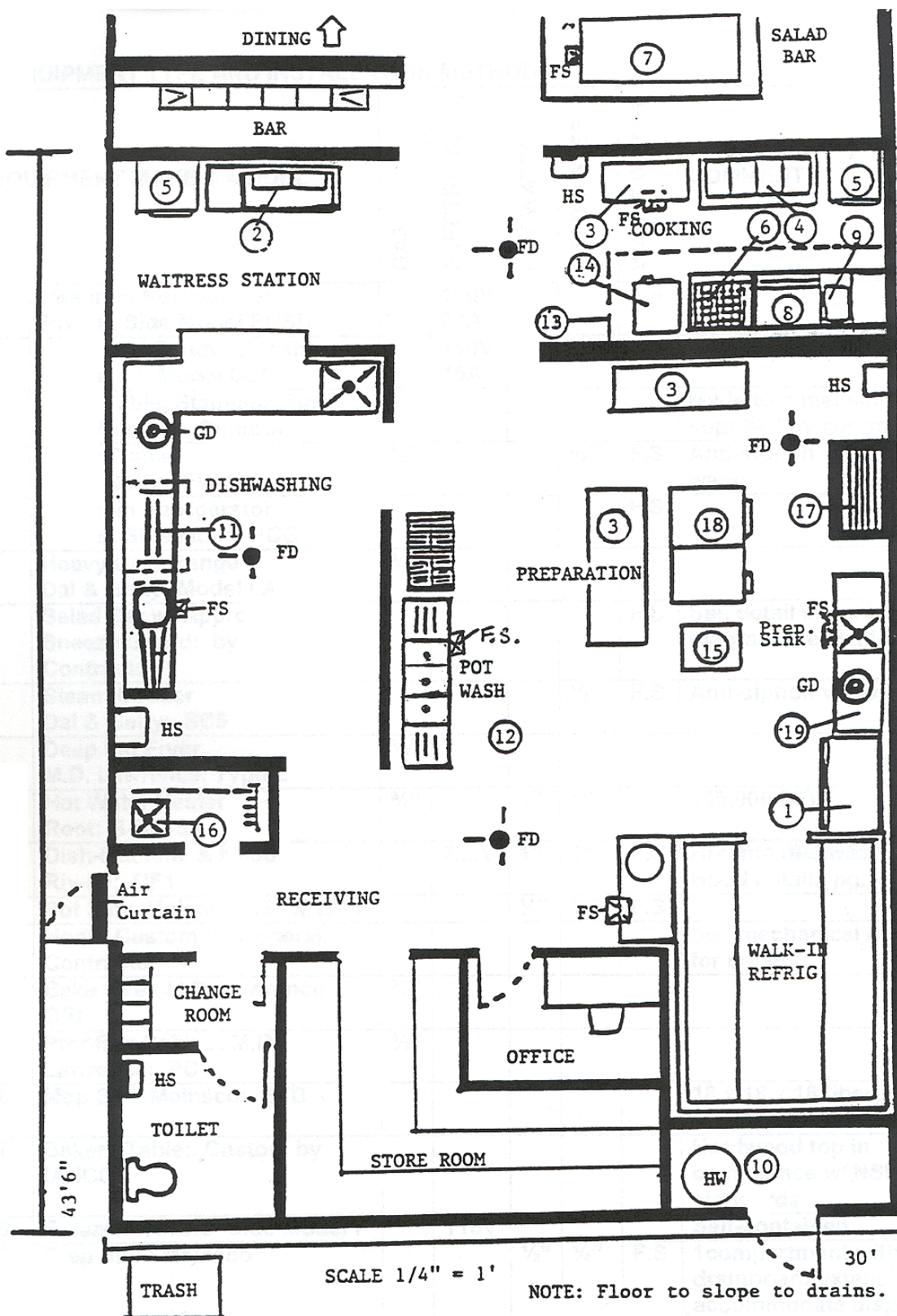
#### **31. BACKFLOW PROTECTION:**


An approved backflow prevention assembly shall be

properly installed upstream from any potential hazard between the potable water system and a source of contamination, e.g., all threaded water outlets, mop sinks, sprayers, dishwashers, etc.

**32. SEWAGE DISPOSAL/GREASE INTERCEPTORS:**

- a. All liquid waste, including sewage, generated by a food establishment, shall be disposed of in an approved manner to the public sewer system.
- b. The grease interceptor shall be installed outside the facility. NOTE: Check with the Water Department for sewerage and grease interceptor requirements.



Each piece of equipment is numbered to correspond to the listing on Attachment IB. Floor drains: FD; Floor Sinks: FS; Hand Sink: HS; Hoods over equipment:  Finish Schedule is found on Attachment III. Garbage Disposal: GD. NOTE: THIS IS NOT INTENDED AS A MODEL LAYOUT, BUT ONLY TO ILLUSTRATE A PROCEDURE FOR PLAN SUBMITTAL & APPROVAL.

ATTACHMENT IA  
(example only)

**\*EQUIPMENT TYPE AND INSTALLATION METHODS**

*EQUIPMENT MAKE & MODEL		GAS	ELECTRICAL	HOT WATER	COLD WATER	WASTE WATER	COMMENTS
1	Reach-in Refrigerator Rivers: Side Model EHSD		110V 20A.			F.S	
2	Salad and Sandwich Table Meinsco : Model DLM		110V 15A.				Self-contained
3	Work Table, Stainless Steel Top Miensco: Custom						Made to dimensions supplied by contractor
4	Steam Table Dal & Getty: FW-100	1/2"			1/2"	F.S	Anti-siphon valve at water
5	Reach-in Refrigerator Rivers: Side Model PCG					F.S	
6	Heavy Duty Range Dal & Getty: Model I.A.N.	3/4"					
7	Salad Bar w/ Approved Sneeze Guard: by General Contractor					F.S	See detail sheet for diagram & elevations
8	Steam Cooker Dal & Getty: SC5				1/2"	F.S	Anti-siphon valve
9	Deep Fat Fryer M.D. Lawrence: Type L	1/2"					
10	Hot Water Heater Root: G-BT155	3/4"		1"	1"		155,000 BTU
11	Dish-Machine & Hood Riv-co: QF1		220V	1"	1"	F.S	Hi-temp dishwasher Hood details pg. A5
12	Pot Sink Meinsco:18" x 18" x 12"			1/2"	1/2"		L x W x D
13	Hood: Custom by General Contractor						See mechanical drawings for details
14	Bake Oven M.D. Lawrence O/B	3/4"					
15	Proofing Cabinet M.D. Lawrence: PC	1/2"					
16	Mop Sink Meinsco: STD						18 x 18 x 18 fiberglass cantilevered from wall
17	Bakers Table: Custom by IANCO						Hardwood top in compliance w/ NSF standards
18	Freezer: Rivers- Side Model F		110V				Self-contained
19	Prep Sink: Meinsco			1/2"	1/2"	F.S	1compartment with drainboard extension to accommodate disposal

**\*\*Above equipment listings are fictitious.**

**ATTACHMENT IB**

**THIS IS A SAMPLE ONLY:** Specific brand names and colors for materials should be specified whenever possible to insure acceptability.

### FINISH SCHEDULE

	FLOOR	FLOOR BASE OR COVE	WALLS	CEILING
FOOD PREPARATION & DISWASHING	Quarry tile	Quarry tile, up wall 4 inches, 3/8" radius cove	F.R.P.	Washable, Non-absorbent lay-in ceiling panels
STOREROOM	Commercial grade Sheet vinyl	Continuous w/floor up wall 4" with 3/8" radius	Drywall with white gloss enamel	Same as above
WAITRESS SERVICE STATION	Quarry tile	Quarry tile, up wall 4 inches with 3/8" radius cove	Water resistant dry wall with 4" ceramic wainscot, light color	Same as above
BAR	Quarry tile	Quarry tile, Same as above	Light colored, enamel painted drywall	Same as above
SALAD BAR*	Quarry tile: Extends 24" beyond table on all sides	Quarry tile, Same as above	N/A	Same as above
RESTROOMS	Ceramic tile	Continuous with floor, 3/8 inch radius sanitary cove	Water-resistant drywall, 4 foot ceramic wainscot	Water-resistant drywall with white enamel paint
MOP ROOM/ EQUIPMENT CLEANING	Quarry tile	Continuous with floor, 3/8 inch radius sanitary cove	F.R.P.	Washable, non absorbent lay-in ceiling panels
DRESSING ROOM(S)	Ceramic tile	Continuous with floor up wall 4" with 3/8" radius cove	Drywall with white enamel paint	Light colored enamel paint on drywall
WALK-IN REFRIGERATOR	** Sealed smooth concrete	Prefabricated Stainless steel wall, 3/8" radius cove	Prefabricated Stainless steel	Prefabricated Stainless steel

\*Salad bar is covered on top and sides by an approved sneeze guard: see detail sheet  
 \*\*Smooth concrete is sealed to be water resistant with an approved sealant.